



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,612	01/02/2002	Deyu Xie	2577-119	7294

6449 7590 03/24/2004

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

BAUM, STUART F

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,612

Applicant(s)

XIE ET AL.

Examiner

Stuart F. Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 37-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-13, 25-27 and 37-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-24 and 28-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/20/2004 + 10/6/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 1/5/2004 has been entered.

Claims 1-34, and 37-42 are pending.

Claims 35-36 are canceled.

Claims 1-13, 25-27, 37-42 are withdrawn for reading on non-elected inventions.
2. Claims 14-24, and 28-34 are examined in the present office action.
3. Rejections and objections not set forth below are withdrawn.
4. The text of those sections of Title 35, U.S. Code not included in this office action can be found in a prior office action.

Enablement

5. Claims 14-24 and 28-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is maintained for the reasons of record set forth in the Official action mailed 7/3/2003. Applicant's arguments filed 1/5/2004 have been fully considered but they are not persuasive.

Applicants contend that they are the first to develop and disclose a method for transforming and for regenerating the tropical legume tree *Acacia mangium* and are entitled to claims of a scope directed to a method for transforming members of this plant species (page 8, 3rd full paragraph). Applicants contend there is no basis for the Examiner to question the

Art Unit: 1638

enablement of the scope of Applicants' claims (page 9, 1st full paragraph). Applicants contend that they have removed the unpredictability in the art as to methods for transforming *Acacia mangium* (page 9, 2nd full paragraph).

The Office contends that Applicants are enabled for obtaining transformed *Acacia mangium* plants by preculturing bud, leaflet, petiole or stem explants from adventitious shoots, in a 0.5 M mannitol solution prior to co-cultivating with *Agrobacterium*, activating *Agrobacterium* using a particular procedure, preculturing said explant on a particular medium, co-cultivating with activated *Agrobacterium* is performed on a particular medium, the selection medium comprises particular components, utilizing acetosyringone to induce *Agrobacterium*-mediated transformation, culturing transformed stem explants on particular media to induce callus and adventitious buds, and further subculturing the transformed adventitious buds to form shoots and whole plants. Even-though Applicants are the first to develop and disclose this method, the breadth of the claims are commensurate with the scope of Applicants disclosure. See *In re Fisher*, 166 USPQ 18, 24 (CCPA 1970), which teaches that the allegedly pioneering nature of an invention does not obviate the need for "a reasonable correlation" between the scope of the claims and "the scope of enablement provided by the specification", wherein "the scope of enablement obviously varies conversely with the degree of unpredictability of the factors involved" in "cases involving unpredictable factors, such as most chemical reactions and physiological activities". Finally, it is noted that Applicants admit the unpredictability inherent in *Acacia* transformation processes (Applicants' response, page 10, top paragraph).

Art Unit: 1638

103 obviousness

6. Claims 14, 18, 20-22, 28-31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (July, 1997, WO 97/23126) in view of Bhaskar et al (1996, Indian Journal of Experimental Biology 34:590-591). This rejection is maintained for the reasons of record set forth in the Official action mailed 7/3/2003. Applicant's arguments filed 1/5/2004 have been fully considered but they are not persuasive.

7. Claims 14, 18, 20-24, 28-31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (July, 1997, WO 97/23126) in view of Bhaskar et al (1996, Indian Journal of Experimental Biology 34:590-591) further in view of Mohamed et al (1996, Plant Cell Tissue and Organ Culture 46:161-164). This rejection is maintained for the reasons of record set forth in the Official action mailed 7/3/2003. Applicant's arguments filed 1/5/2004 have been fully considered but they are not persuasive.

Because Applicants' responses to the above two rejections are similar, they will be dealt with together.

Applicants urge that the 103 rejections are improper given the use by the Examiner of non-*Acacia* references and the lack of expectation that the techniques in these references would work for *Acacia*.

The Office contends that Applicants' unexpected results require the use of particular means of *Agrobacterium* activation, particular explants, particular culture media, and particular regeneration steps. But none of the claims have all the specified limitations and the scope of the claims does not reflect the disclosed facts. See *In re Lindner*, 173 USPQ 356 (CCPA 1972) and

Art Unit: 1638

In re Grasselli, 218 USPQ 769 (Fed. Cir. 1983) which teach that the evidence of nonobviousness should be commensurate with the scope of the claims.

8. No claims are allowed.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

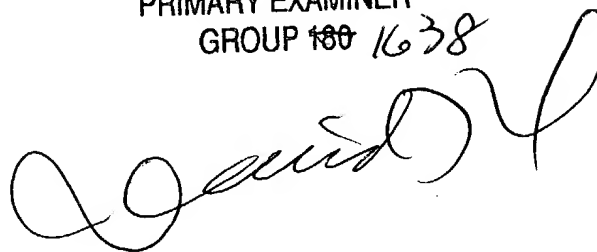
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 1638

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Stuart F. Baum Ph.D.
Patent Examiner
Art Unit 1638
February 20, 2004

DAVID T. FOX
PRIMARY EXAMINER
GROUP ~~180~~ 1638

A handwritten signature in black ink, appearing to read "David T. Fox", written over the printed name and title.